

FIGURE 1: Preparation of the formulation in the form of a pellet
 (using the example of polymer particles;
 alternatively, lipid particles can be used)

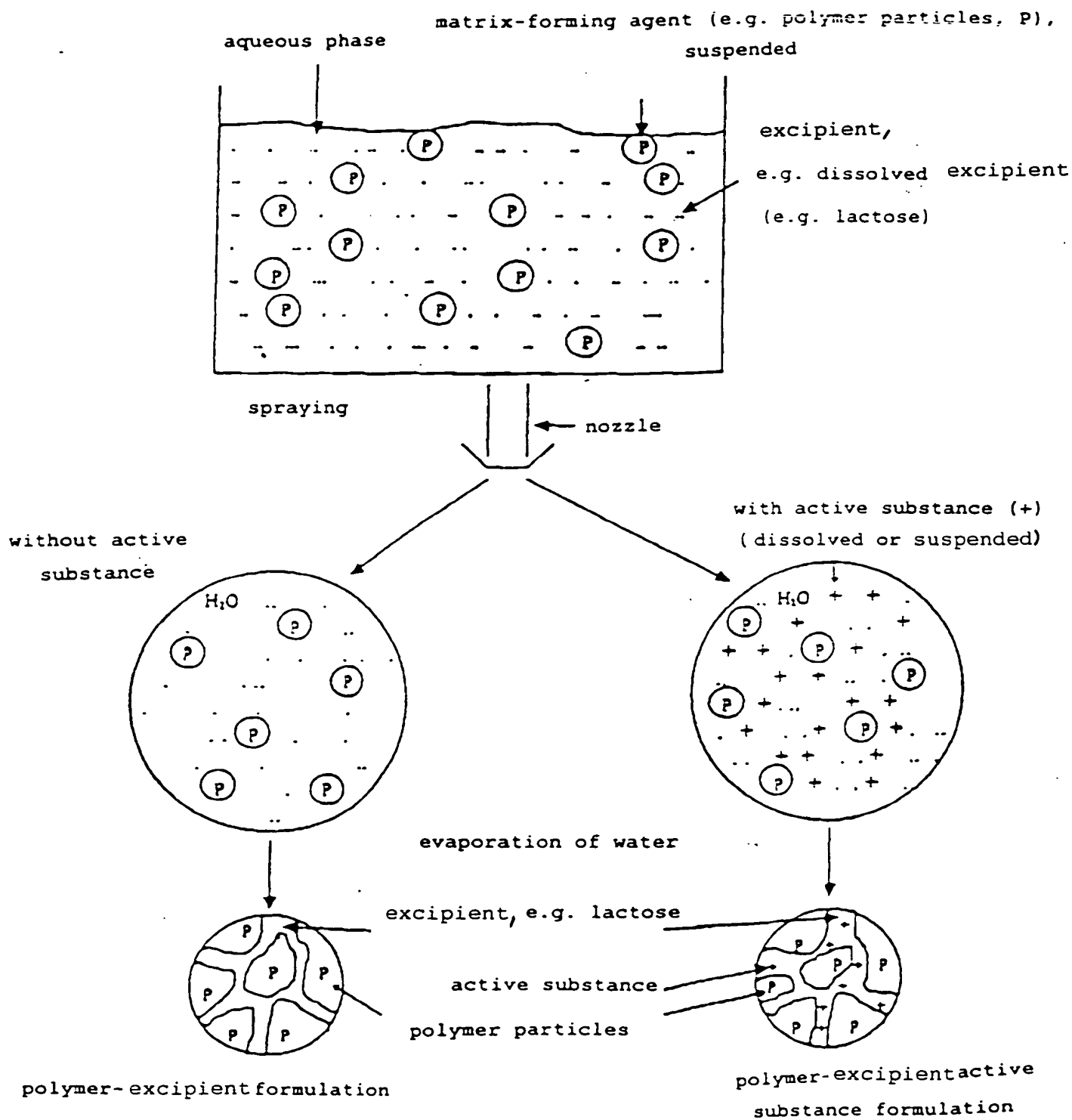
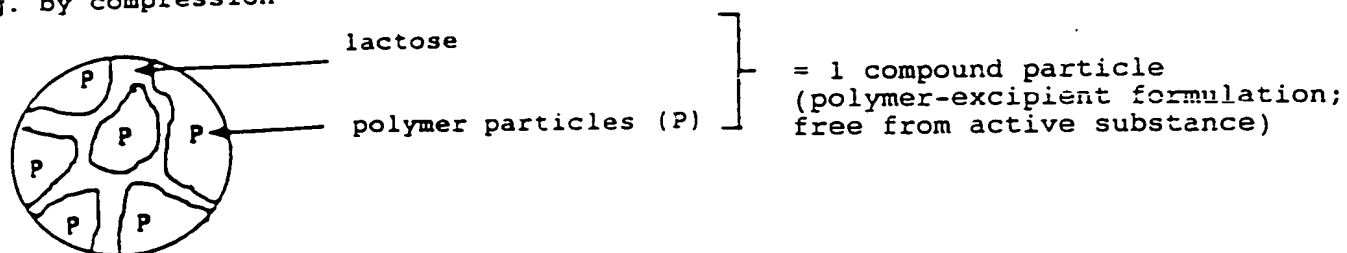


FIGURE 2: Preparation of larger matrix units

(using the example of polymer particles;
alternatively lipid particles can be used)

e.g. by compression



- + active substance particles (WS)
- + if appropriate tablet-making excipient
(e.g. lubricant, moulds release agent)

tablet/implant

= 1 particle of
polymer-excipient formulation

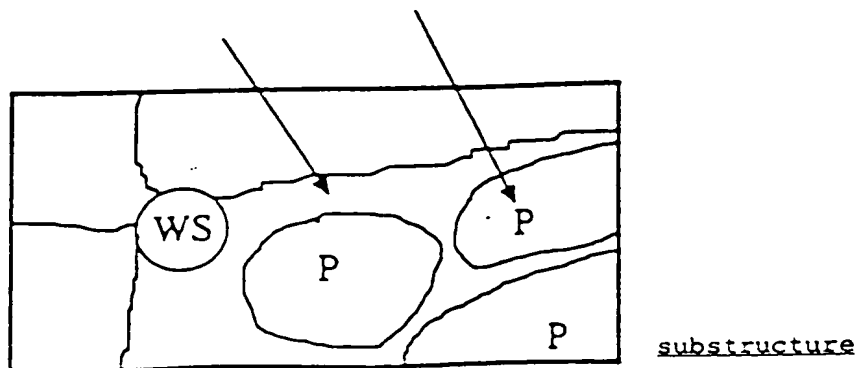
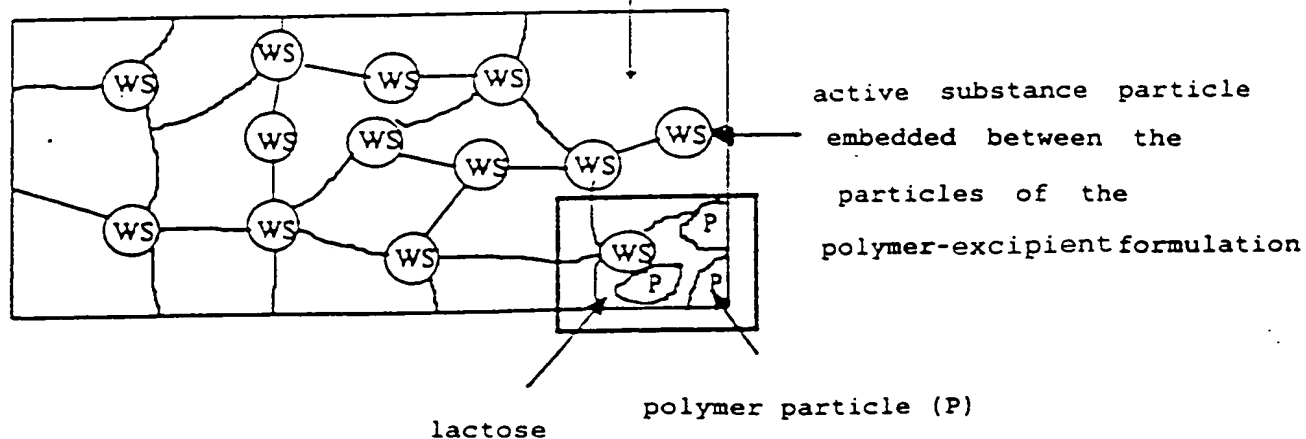


FIGURE 3a: O/W emulsion process (prior art)

- solvent evaporation
- in-liquid drying
- supercritical gas extraction

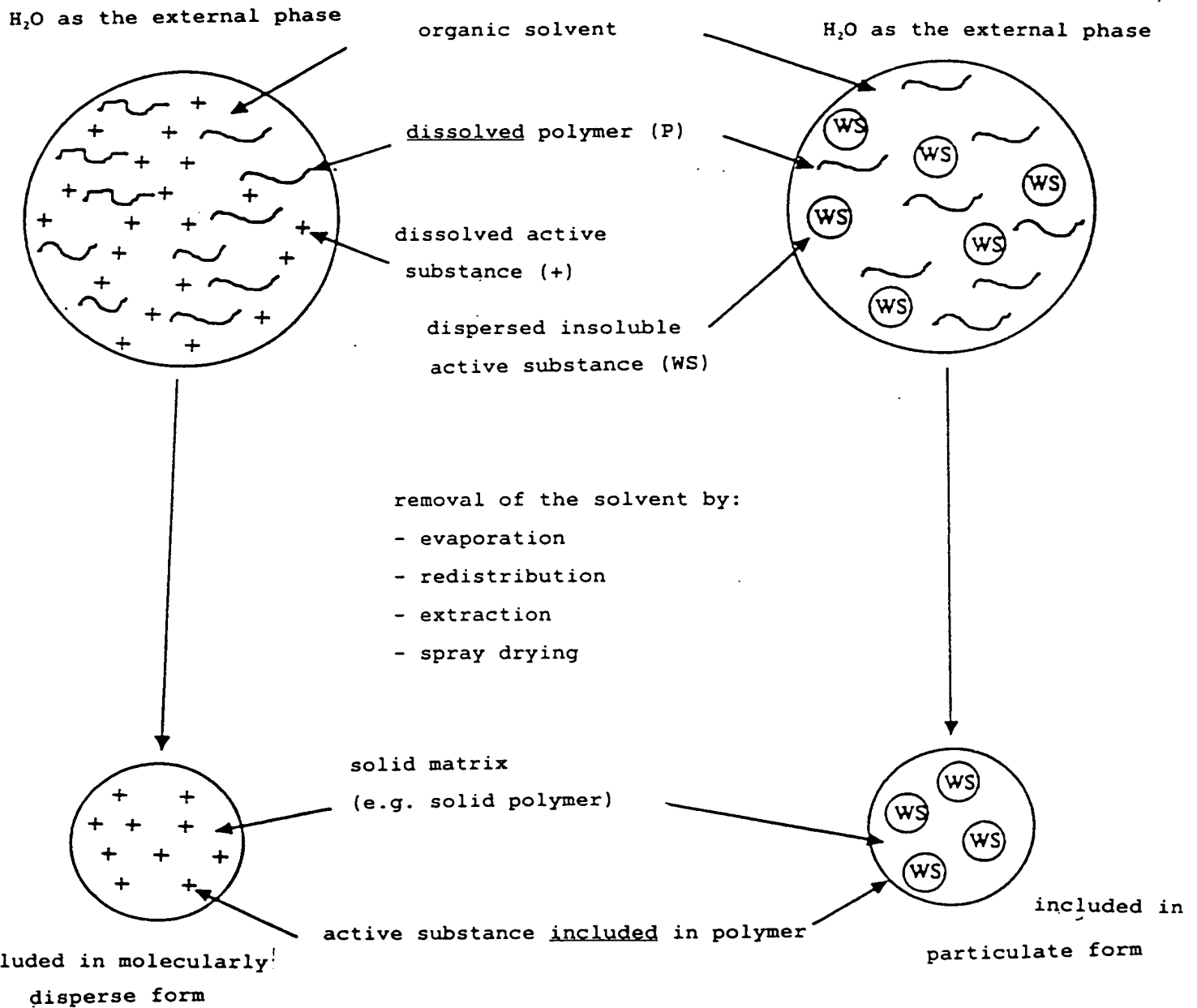


FIGURE 3b: W/O emulsion process (prior art)

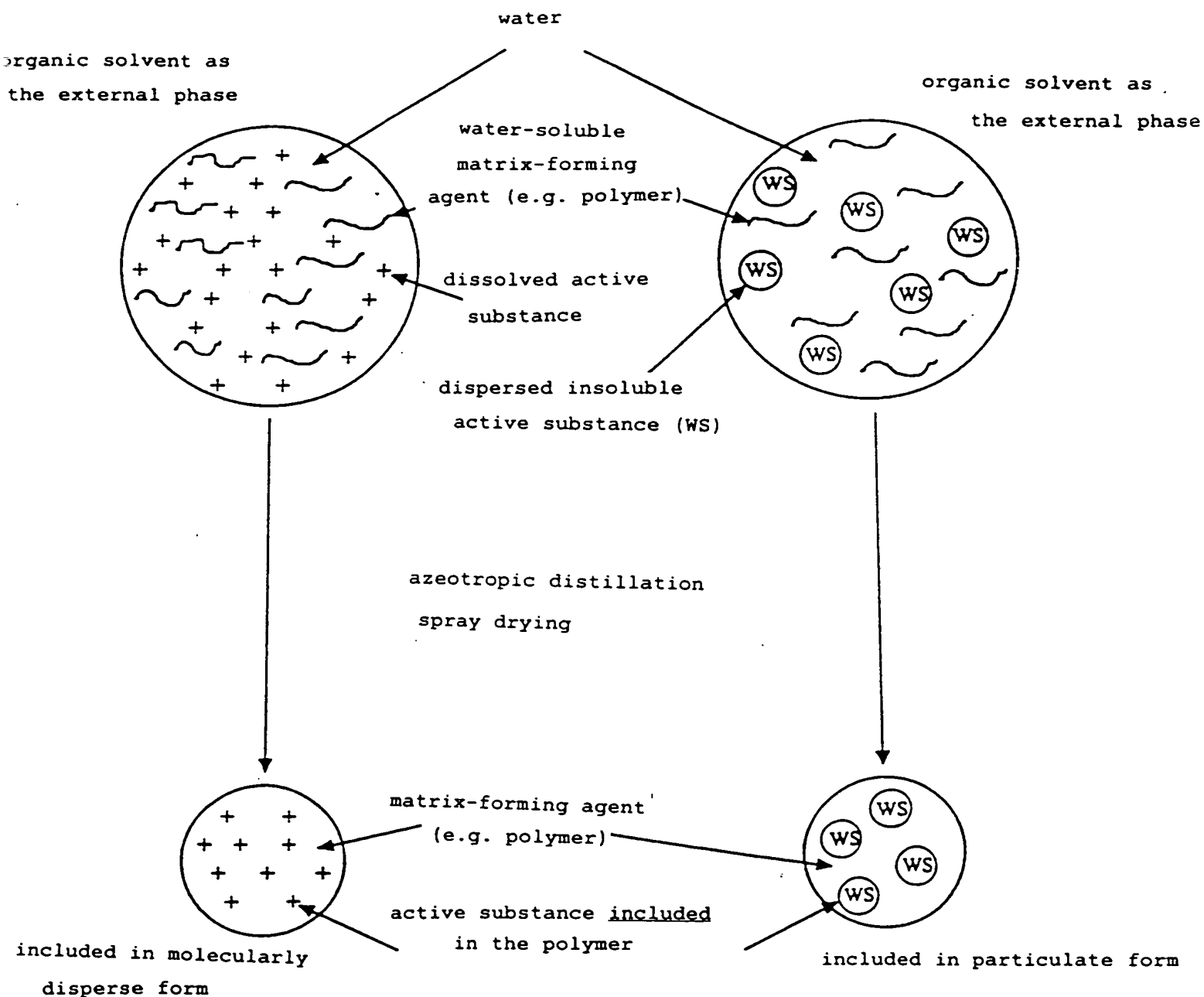
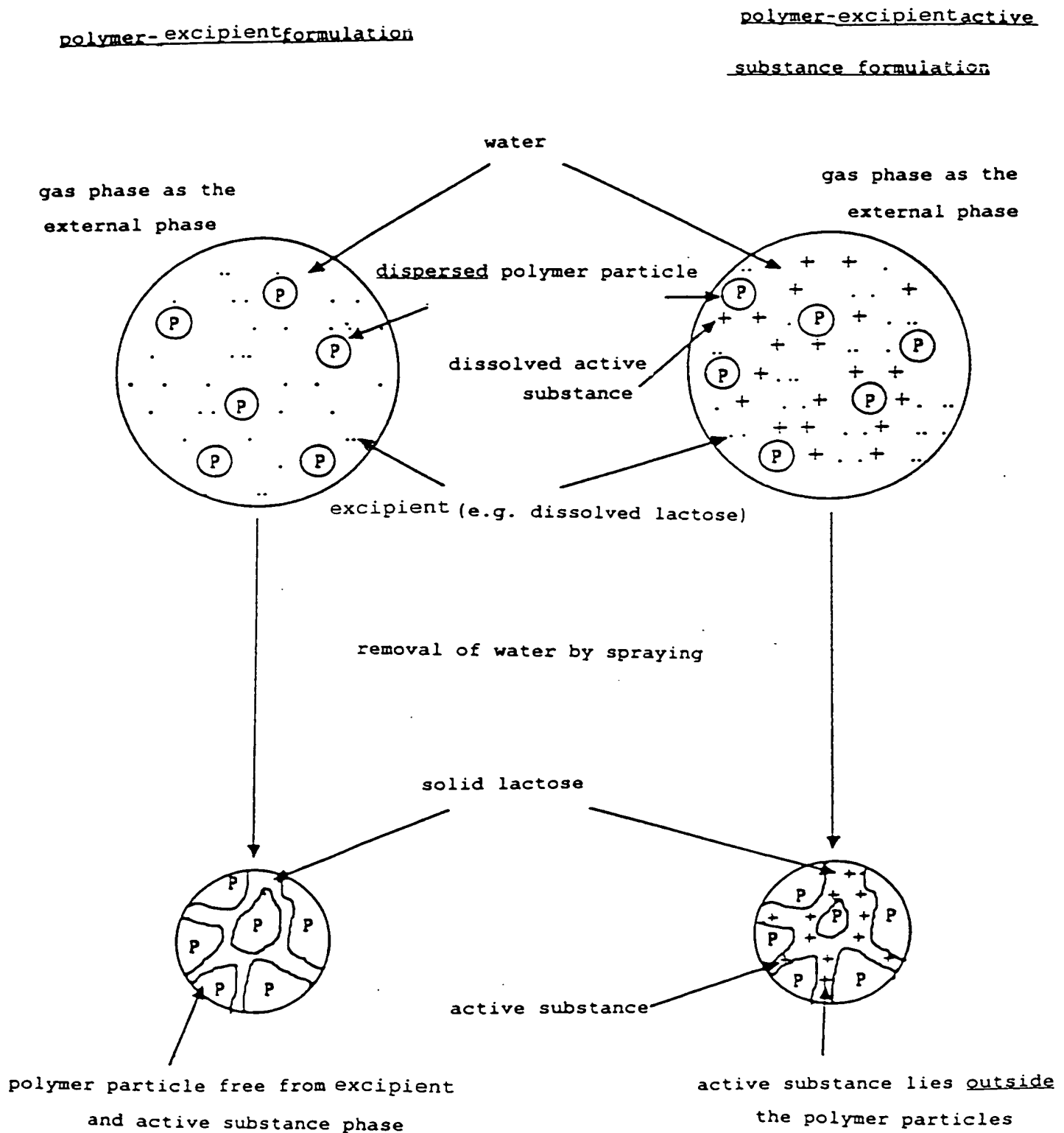


FIGURE 4: Process according to the invention
 (using the example of polymer particles;
 alternatively, lipid particles can be used)



Figures of lipid compounds/1

Spray-dried SLN (Compritol+trehalose 10 + 3),
paracetamol release from directly compressed tablet

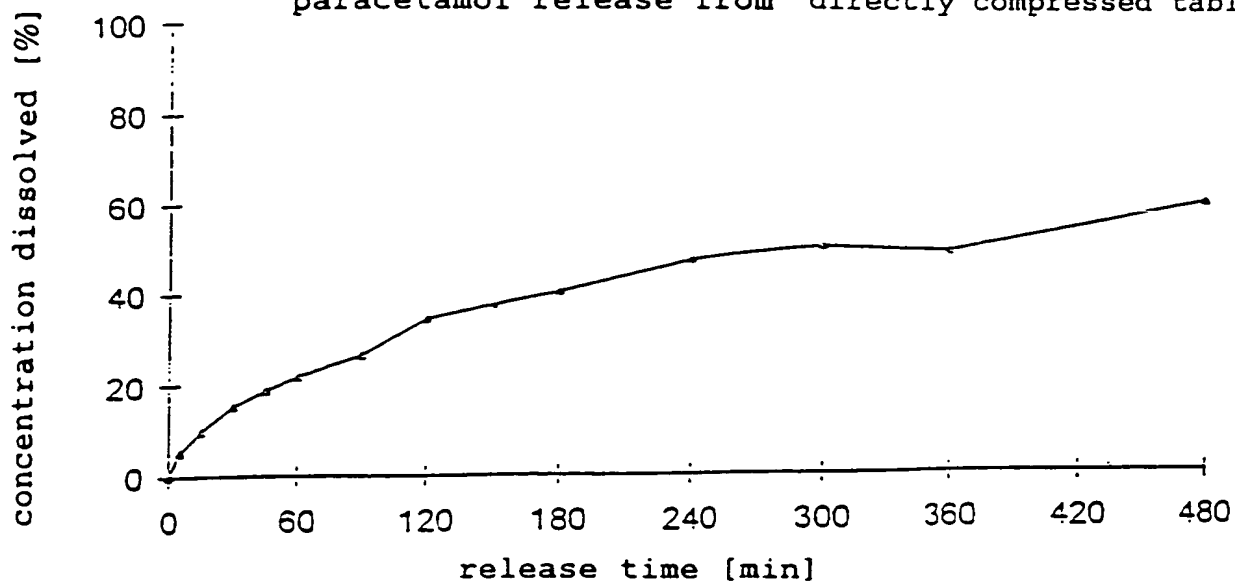


Fig. 5: Release of paracetamol from a tabletted mixture of spray-dried lipid-trehalose compound (9 parts) plus paracetamol (1 part) with admixing of 0.5 % Aerosil 200 and 0.5 % magnesium stearate. (Tablet weight : 500 mg, composition lipid-trehalose compound Compritol 888 ATO 10 parts plus 3 parts trehalose)

SLN (Compritol + trehalose 10 + 3),
root/time plot of the release up to 360 min

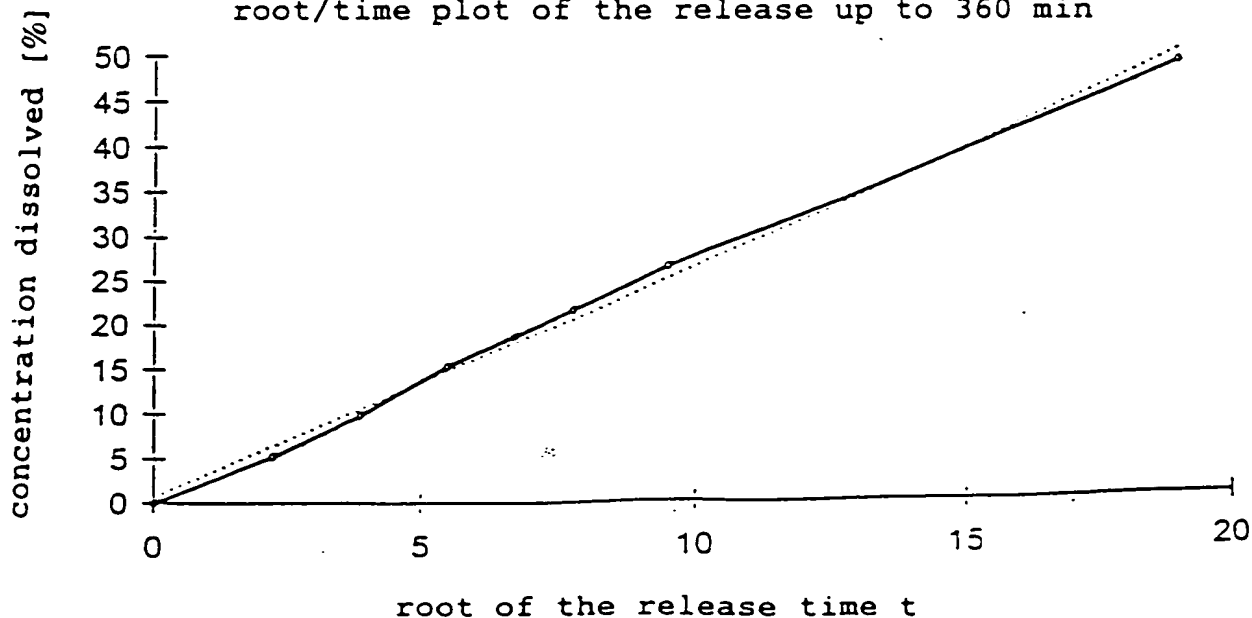


Fig. 6: Root/time plot of the release curve from fig. 5 to demonstrate the matrix release (broken line = trend line)